

CLAIMS

What is claimed is:

1. A method for applying a fungicide to a tree, the method comprising:
applying an insecticide or a plant growth regulator composition to the
5 bark periderm of woody plants without mechanically penetrating or piercing
the bark of the plant, the an insecticide or a plant growth regulator
composition including (a) an insecticide or a plant growth regulator; (b) an
organosiloxane surfactant; and (c) water.
- 10 2. The method of claim 1, where said step of applying includes spraying an
insecticide or a plant growth regulator composition on the bark periderm.
3. The method of claim 1, where said step of applying includes an application
rate corresponding to applying about 25 to about 125 grams of an insecticide or a
15 plant growth regulator to six feet of a tree, measured from the base, where the tree
has a diameter breast height of about six inches.
4. The method of claim 1, where said step of applying includes an application
rate corresponding to applying about 35 to about 105 grams of an insecticide or a
20 plant growth regulator to six feet of a tree, measured from the base, where the tree
has a diameter breast height of about six inches.
5. The method of claim 1, where said step of applying includes an application
rate corresponding to applying about 45 to about 95 grams of an insecticide or a
25 plant growth regulator to six feet of a tree, measured from the base, where the tree
has a diameter breast height of about six inches.
6. The method of claim 1, where said step of applying includes an application
rate corresponding to applying about 50 to about 75 grams of an insecticide or a
30 plant growth regulator to six feet of a tree, measured from the base, where the tree
has a diameter breast height of about six inches.

7. The method of claim 1, where the insecticide or a plant growth regulator composition includes a solvent.

8. The method of claim 7, where the solvent is selected from the group consisting of alcohols, glycols, and glycol esters.

9. The method of claim 7, where the insecticide or a plant growth regulator composition includes a surface active agent.

10. The method of claim 9, where the surface active agent is selected from the group consisting alcohol alkoxylates based on branched and linear alcohols containing ethylene oxide or propylene oxide, alcohol alkoxylate sulfates, nonylphenol alkoxylate containing ethylene oxide, nonylphenol alkoxylate containing propylene oxide, octylphenols alkoxylate containing ethylene oxide, octylphenols alkoxylate containing propylene oxide, fatty amine alkoxylates, butanediols, butyl cellulose ether, butyl carbitol, propylene glycol, ethylene glycol, mipropylene glycol, diethylene glycol, phosphate esters of alcohol alkoxylates, phosphate esters of alkylphenol alkoxylates, sorbitan esters, alkoxylated sorbitan esters and alkylpolyglucosides.

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11. The method of claim 1, where the insecticide or a plant growth regulator composition includes from about 0.0001 to about 3.0 parts by weight of the organosiloxane surfactant per part of an insecticide or a plant growth regulator.

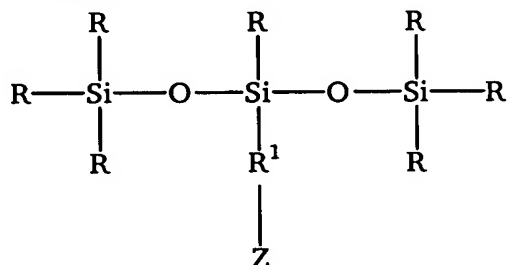
12. The method of claim 1, where the insecticide or a plant growth regulator composition includes from about 0.003 to about 0.05 parts by weight of the organosiloxane surfactant per part of systemic fungicide.

13. The method of claim 7, where the insecticide or a plant growth regulator composition includes from about 0.0001 to about 1.0 parts by weight solvent per part of an insecticide or a plant growth regulator.

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14. The method of claim 9, where the insecticide or a plant growth regulator composition includes from about 0.0001 to about 2.0 parts by weight surface active agent per part of an insecticide or a plant growth regulator.

- 5 15. The method of claim 1, where the organosiloxane surfactant includes a trisiloxane defined by the formula



where R is a short chain alkyl group, R¹ is an alkylene group, and Z is a polyoxyalkylene group.

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16. The method of claim 15, where the organosiloxane includes a polyoxyethylene heptamethyl trisiloxane.

17. The method of claim 1, where said step of applying an insecticide or a plant growth regulator composition to the bark periderm of woody plants includes applying the insecticide or a plant growth regulator composition to the bark of the woody plant in a location from the root flare up to the first branch of the plant.

18. The method of claim 17, where said step of applying an insecticide or a plant growth regulator composition to the bark periderm of woody plants includes applying the insecticide or a plant growth regulator composition to the bark of the woody plant in a location from the root flare up to the second branch of the plant.

19. The method of claim 17, where said step of applying includes an application rate corresponding to applying about 25 to about 125 grams of insecticide or a plant growth regulator to six feet of a tree, measured from the base, where the tree has a diameter breast height of about six inches.

20. The method of claim 17, where said step of applying includes an application rate in an amount that the insecticide or a plant growth regulator composition will runoff the bark.

5 21. The method of claim 17, where the bark periderm of the woody plant to which the insecticide or a plant growth regulator composition is applied consists essentially of that portion between the root flare and the first branch.

10 22. The method of claim 21, where the bark periderm of the woody plant to which the insecticide or a plant growth regulator composition is applied consists that portion between the root flare and the first branch.